

**Additional File 3: Effects of OP and CM larvicides on *Anopheles gambiae* from Mayotte.**

Insecticide	Strain	N	LC <sub>50</sub> (CI <sub>95</sub> )	LC <sub>95</sub> (CI <sub>95</sub> )	Slope	RR <sub>50</sub> (CI <sub>95</sub> )	RR <sub>95</sub> (CI <sub>95</sub> )
Temephos	KIS	1164	1.5x10 <sup>-3</sup> (1.2x10 <sup>-3</sup> – 1.8x10 <sup>-3</sup> )	5.0x10 <sup>-3</sup> (4.1x10 <sup>-3</sup> – 6.7x10 <sup>-3</sup> )	3.17	-	-
	DZOU	1080	7.4x10 <sup>-3</sup> (6.1x10 <sup>-3</sup> – 9.1x10 <sup>-3</sup> )	6.4x10 <sup>-2</sup> (4.1x10 <sup>-2</sup> – 1.3x10 <sup>-1</sup> )	1.75	<b>4.84 (4.16 - 5.64)</b>	<b>12.9 (7.68 - 21.6)</b>
	DZKIS	1106	1.1x10 <sup>-2</sup> (9.6x10 <sup>-3</sup> – 1.2x10 <sup>-2</sup> )	1.7x10 <sup>-2</sup> (1.5x10 <sup>-2</sup> – 2.3x10 <sup>-2</sup> )	7.58	<b>6.93 (5.84 - 8.21)</b>	<b>3.46 (2.47 - 4.85)</b>
	AcerKIS	302	2.5x10 <sup>-2</sup> (2.2x10 <sup>-2</sup> – 2.9x10 <sup>-2</sup> )	5.1x10 <sup>-2</sup> (4.1x10 <sup>-2</sup> – 7.3x10 <sup>-2</sup> )	5.38	<b>16.4 (12.2 - 22.2)</b>	<b>10.1 (5.29 - 19.2)</b>
Chlorpyrifos	KIS	1199	7.2x10 <sup>-4</sup> (6.7x10 <sup>-4</sup> – 7.7x10 <sup>-4</sup> )	1.4x10 <sup>-3</sup> (1.2x10 <sup>-3</sup> – 1.5x10 <sup>-3</sup> )	6.06	-	-
	DZKIS	1041	8.7x10 <sup>-4</sup> (7.7x10 <sup>-4</sup> – 9.7x10 <sup>-4</sup> )	1.7x10 <sup>-3</sup> (1.4x10 <sup>-3</sup> – 2.1x10 <sup>-3</sup> )	5.83	<b>1.21 (1.08 - 1.35)</b>	<b>1.24 (1.02 - 1.5)</b>
Malathion	KIS	840	1.9x10 <sup>-2</sup> (1.8x10 <sup>-2</sup> – 2.2x10 <sup>-2</sup> )	4.4x10 <sup>-2</sup> (3.7x10 <sup>-2</sup> – 6.0x10 <sup>-2</sup> )	4.56	-	-
	DZKIS	492	4.3x10 <sup>-2</sup> (3.6x10 <sup>-2</sup> – 5.3x10 <sup>-2</sup> )	6.8x10 <sup>-2</sup> (5.5x10 <sup>-2</sup> – 1.4x10 <sup>-1</sup> )	8.29	<b>2.23 (1.69 - 2.95)</b>	1.52 (0.74 - 3.11)
	AcerKIS	348	4.1x10 <sup>-1</sup> (2.6x10 <sup>-1</sup> – 6.4x10 <sup>-1</sup> )	1.51 (0.90 – 4.95)	2.93	<b>21.5 (6.15 - 75.2)</b>	33.9 (0.3 - 3766)
Propoxur	KIS	588	1.5x10 <sup>-2</sup> (1.1x10 <sup>-2</sup> – 1.8x10 <sup>-2</sup> )	4.9x10 <sup>-2</sup> (3.8x10 <sup>-2</sup> – 7.1x10 <sup>-2</sup> )	3.15	-	-
	DZKIS	841	8.1x10 <sup>-2</sup> (7.6x10 <sup>-2</sup> – 8.8x10 <sup>-2</sup> )	1.2x10 <sup>-1</sup> (1.1x10 <sup>-1</sup> – 1.5x10 <sup>-1</sup> )	9.62	<b>5.57 (4.07 - 7.62)</b>	<b>2.48 (1.23 - 4.99)</b>
	AcerKIS	494	144 (129 – 159)	243 (209 – 317)	7.26	<b>9872 (7511 - 12975)</b>	<b>4988 (3138 - 7927)</b>

Resistance levels of the introgressed DZKIS strain are compared to resistance levels of the reference strains KIS and AcerKIS for three OP (temephos<sup>a</sup>, chlorpyrifos, malathion) and one CM (propoxur) larvicides. N is the total number of tested larvae. The 50 and 95% lethal concentrations (LC<sub>50</sub> and LC<sub>95</sub>) are expressed in mg/l, with their associated confidence intervals at 95% (CI<sub>95</sub>). Finally, the corresponding resistant ratios (RR), i.e. the ratios of LC of the tested strain over the LC<sub>50</sub> of the susceptible reference strain, are also indicated and bolded when significantly higher than 1 (i.e. when CI<sub>95</sub> does not include 1).

<sup>a</sup>DZOU results for temephos have been reported here from Additional File 1 for easier comparison.